



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,430	10/31/2003	Naysen J. Robertson	200314783-1	3276
22879 7590 05/11/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER WEINSTEIN, LEONARD J	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 05/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/699,430

Applicant(s)

ROBERTSON ET AL.

Examiner

Leonard J. Weinstein

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment of 03/08/2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

Drawings

2. The drawings are objected to because as best understood by the examiner figure 5, as disclosed on page 14, should show two different fan motors however a separate reference numeral designating a "replacement motor" needed to differentiate said "replacement motor" from a "failed fan motor." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: on page 14 elements 506 and 507 are both referred to as a failed fan motor transport belt, and in addition element 503 is referred to as a fan motor and a replacement fan motor. It is suggested by the examiner that the disclosure be amended to recite a failed motor transport belt 506 and a second failed motor transport belt 507; further it is suggested that the reference numeral 503 be used to designate a fan motor which has failed and the reference numeral 503' be used for a replacement fan motor for the purpose of clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. The term "substantially different power characteristics" in claims 6 and 13 is a relative term which renders the claim indefinite. The term "substantially different power characteristics" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The difference between the power characteristics of a first, second, and further a plurality of motors cannot be ascertained because the limitations as claimed do not define what the power characteristics of the fan motor(s) are and how they are variable.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1 and 8 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 8-10 and 18 of U.S. Patent No. 6,956,344 B2.

Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 of the instant application recites:

A fan motor assembly with integrated redundant availability, said fan motor assembly comprising: a fan motor subassembly comprising a plurality of replaceable fan motors; a fan motor selector mechanism coupled to said fan motor subassembly, said fan motor selector mechanism configured to selectively engage one of said plurality of replaceable fan motors to a fan; and a control unit coupled to said fan motor selector mechanism, said control unit configured to control said fan motor selector mechanism such that a first of said plurality of replaceable fan motors mechanically powers said fan while a second of said plurality of replaceable fan motors can be dynamically removed from said fan motor subassembly.

Claims 1-3 of the US Patent 6,956,344 recite the following:

Claim 1:

A fan motor assembly with integrated redundant availability, said fan motor assembly comprising: a fan motor subassembly comprising a first fan motor and a second fan

Art Unit: 3746

motor; a fan motor selector mechanism coupled to said fan motor subassembly, said fan motor selector mechanism configured to selectively couple said first fan motor or said second fan motor to a fan; a control unit coupled to said fan motor selector mechanism, said control unit configured to control said fan motor selector mechanism such that either of said first fan motor and said second fan motor is selectively engaged to said fan.

Claim 2:

The fan motor assembly of claim 1 wherein said fan motor subassembly is removably coupleable to said fan motor assembly.

Claim 3:

The fan motor assembly of claim 1 wherein said fan motor subassembly is selectively driven by either said first fan motor or said second fan motor.

Claims 1-3 of the patent do not recite a first and second plurality of replaceable fan motors nor the limitation wherein a fan can be driven by one set of a plurality of replaceable fan motors at the same time that another plurality of fan motors is removed from a fan motor assembly.

However claim 18 of the patent claims the following:

Claim 18:

The method for providing redundant availability in a fan system as recited in claim 15 further comprising: provided said measured performance characteristic of said first fan motor does not meet said specified fan motor performance requirement, enabling removal of said first fan motor after automatically disposing said fan motor subassembly in said orientation for engaging said fan with said second fan motor such that said first motor is removable without interfering with use of said second fan motor to drive said fan.

Therefore the apparatus of claims 1-3 of the patent, as claimed, include a fan motor subassembly with two fan motors each capable of driving a fan while the other fan motor is being removed and thus replaced. With regards to the limitation of the instant application including a "plurality of replaceable fan motors" the patent claims only a first and second fan motor however it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore

Art Unit: 3746

the patent anticipates the instant application. Further claim 8 of the instant application recites the limitation of a fan motor assembly comprising first and second replaceable fan motors and is anticipated by claim 8 of patent on the same grounds as discussed with reference to claim 1 of the instant application.

9. Claims 2 and 9 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 8-9, and 18-19 of U.S. Patent No. 6,956,344

B2. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 2 of the instant application recites:

The fan motor assembly of claim 1 wherein said second of said plurality of replaceable fan motors causes said fan motor subassembly to move from a first position to a second position wherein said second of said plurality of fan motors is engaged to said fan.

Claim 19 of US Patent 6,956,344 B2 recites the following limitation:

The method for providing redundant availability in a fan system as recited in claim 15 wherein said automatically disposing said fan motor subassembly comprises using said second fan motor to drive said fan motor subassembly such that said second fan motor is engaged with said fan.

Therefore the apparatus of claims 1-3 of the patent, as claimed, include a fan motor subassembly with two fan motors each capable of driving a fan while the other fan motor is being removed and thus replaced. Further the apparatus of claim of claims 1-3 is capable, as claimed, of using a second fan motor to from a disengaged position to a position wherein the motor is engaged to a fan. Therefore the patent as discussed anticipates the limitations of the instant application as claimed. Claim 9, dependent on claim 8 of the instant application, recites the limitation for a first and second replaceable fan motor of a fan motor subassembly and is anticipated by claim 9 of the patent on the same grounds of anticipation discussed with regards to claim 2 of the instant application.

Art Unit: 3746

10. Claims 3, 6, 10 and 13 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 8-10 and 18 of U.S. Patent No. 6,956,344 B2 in view of Aldridge US 2003/0122430 A1. The patent anticipates the limitations as substantially claimed and discussed but fails to claim the limitation of a redundant power source comprised of a first of said plurality of replaceable fan motors and said second of said plurality of replaceable fan motors comprising a redundant power source. Aldridge teaches a set of fans 145 each having an internal power source, elements 175 and 180, and a system power source, elements 260 and 270 (Aldridge ¶0024). It is understood that the fan can be power by either power source thus constituting a redundant power supply. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a first fan motor and second fan motor as a redundant power supply for a fan motor assembly to ensure components of a system continue to be cooled in the event a fan fails due to a power supply failure (Aldridge ¶0007).

11. Claims 4 and 11 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 8, 11, and 18 of U.S. Patent No. 6,956,344 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 4 and 11 of the patent recites the limitation of fan motor performance monitoring unit configured to determine a performance characteristic of said first fan motor.

12. Claims 15-17 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-19 of U.S. Patent No. 6,956,344 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because as discussed the limitation of the patent anticipates a first and second replaceable fan motor as claimed in the method of instant application.

Response to Arguments

13. Applicant's arguments filed 03/08/07 have been fully considered but are not persuasive with respect to applicant's traverse to the objection to the specification in the office action of 12/06/2006.

a. Applicant argues that with respect to elements 506 and 507, the examiner is assuming that only one motor transport belt can fail. Further applicant argues that various embodiments teach that more than one motor transport belt can fail and therefore either or both 506 and 507 can be failed motor transport belts. The examiner disagrees with applicant's argument on the grounds that page 14 references figure 5 with regards to the subject matter cited in the prior office action but it is unclear to which configuration, as disclosed on lines 9-11 of page 14, figure 5 exhibits. The disclosure recites that a "a failed motor transport belt 506 can be coupled to fan motor drive belt 502 either directly or through a failed motor transport belt 507." Further as understood by the examiner a "failed motor transport belt" is not a component which fails, rather, this designation is used by the applicant to describe a transport belt that is utilized to move a fan motor that has failed. A clarification of which configuration is shown in figure 5 is needed, further examiner suggests the specification be amended to recite a failed motor transport belt 506 and a second failed motor transport belt 507 for proper clarity.

b. Applicant argues that with respect to element 503, a "fan motor" can be a "replacement fan motor" and therefore referring to 503 as a fan motor in one place and a replacement fan motor in another place is not a contradiction.

Again applicant refers to figure 5 with reference to the subject matter of page 14, which

has been objected to by the examiner. It is unclear which motor is the "failed fan motor" and which is the "replacement motor." Examiner suggests that specification be amended to recite ---in one embodiment, when a fan motor 503 failure is detected, a transport level voltage is applied to a replacement fan motor 503' while it is located at position A--- for the purpose of clarity. It is unclear in figure 5 whether there is a single motor 503 moving from one position to another or there are two motors as disclosed on page 14. The examiner further suggests that figure 5 and the disclosure be amended to show a "replacement motor" with a different reference numeral such as 503' for clarity. Applicant's statement that the Office Action has misquoted page 14 as referring to 503 as a "pre-existing fan motor" is noted.

c. With respect to applicant's traverse of Office Action's rejection of Claims 6 and 13 for reciting "substantially different..." MPEP 2173.05(b)D states that the term "substantially" is definite because one of ordinary skill in the art would know what was meant by "substantially." As stated above in this office action claims 6 and 13 the term "substantially different power characteristics" is not defined by the claim, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention because the limitations as claimed do not define what the power characteristics of the fan motor(s) are and how they are variable. Examiner acknowledges applicant's assumption that the office action of 12/06/06 intended to reject claims 6 and 13, and not claims 4 and 11.

14. Applicant's arguments, see pages 7-9, filed 03/08/2007, with respect to the rejection(s) of claim(s) 1-19 under 102(a) have been fully considered and are persuasive. Therefore, the rejection of claim(s) 1-19 under 102(a) has been withdrawn.

Art Unit: 3746

15. Applicant's arguments, see pages 9-11, filed 03/08/2007, with respect to the rejection(s) of claim(s) 1-19 under 35 U.S.C. 101 as claiming the same invention have been fully considered and are persuasive. Therefore, the rejection of claim(s) 1-19 under 35 U.S.C. 101 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6,956,344 B2, on the grounds of nonstatutory obviousness-type double patenting.

Allowable Subject Matter

16. Claims 5, 7, 11, 14, and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are cited on form 892 herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


LJW
ANTHONY D. STASHICK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700